Williamson County, Tennessee

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Department of

Community Development 2015 ANNUAL REPORT



COMMUNITY DEVELOPMENT
BUILDING CODES
CODES COMPLIANCE
ENGINEERING
PLANNING
SEWAGE DISPOSAL MANAGEMENT

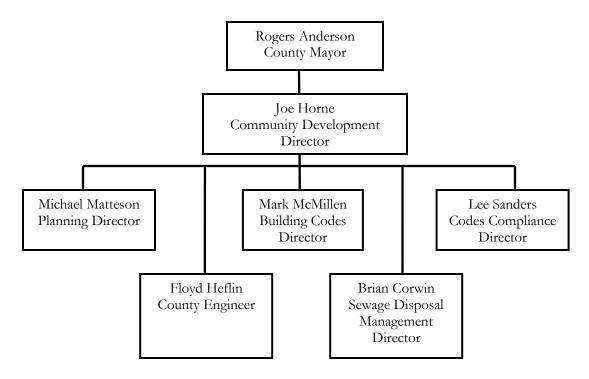
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Department of Community Development

Introduction

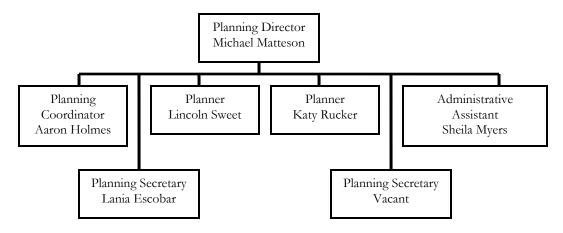


The Community Development Department provides the framework for planning and development services for the unincorporated portion of Williamson County. In a county undergoing the growth confronting Williamson County, it is important these services are integrated as much as practicable. The integration of these services allows not only for the provision of housing and related services to our community, but allows for the opportunity to monitor these markets and develop new techniques to mitigate the effects of this growth.

Department of Planning & Zoning

Introduction

County Planning plays a fundamental role in maintaining the quality of development in Williamson County. This role includes assisting developers and the general public in administering the Zoning Ordinance and other regulations. This department is responsible for support of the County Board of Commissioners, the Williamson County Regional Planning Commission, the Highway Commission, and other boards that may require routine aid in administering and interpreting the Zoning Ordinance, the Subdivision Regulations and for any specific research that may arise.



The County's Planning Department is located on the 4th floor of the Williamson County Administrative Complex along with the Building Codes, Codes Compliance, Engineering, and Sewage Disposal Management Departments. County Planning services are directed by Michael Matteson, Planning Director, who is assisted by Aaron Holmes, Lincoln Sweet, and Katy Rucker.

Overview

The following is a summary of the activity for 2015. This data will allow the Staff, the Planning Commission, the Board of Commissioners and the general public insight into the amount of growth within the county.

Zoning Certificates

This form is the beginning of the planning process for both the general public and developers. For every project, whether it be for a new home, an addition to an existing home, a swimming pool, a subdivision, or a non-residential development, a Zoning Certificate is required. This form serves two purposes. The first is to provide both the Staff and the applicant with a written record of the required procedure to achieve an approval. Secondly, this written record can help alleviate any misunderstandings between the Staff and the applicant.

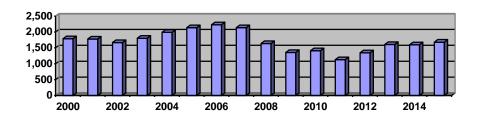
When a request for a Zoning Certificate is submitted, the Staff obtains the property assessment card, confirms the zoning, the use that is currently on the property, and the floodplain status, if any. Staff

will determine if the requested use can occur on the property and, if it is allowed, the applicant may proceed. In some instances, the Plans Review process is required before the Staff can grant approval to a use. Plans Review provides each department, i.e. Building Codes, Codes Compliance, Engineering, Highway, Planning, and Sewage Disposal an opportunity to review the request to ensure it meets their requirements as well.

In 2015, the staff processed 1,681 Zoning Certificates. See Figure 1 below.

Figure 1

Zoning Certificates Issued 2000-2015



Map Amendments

A new Zoning Ordinance (2013 Zoning Ordinance) and Official Zoning Map (2013 Zoning Map) were adopted in May of 2012. One amendment to the new Official Zoning Map was approved in 2015.

Text Amendments

In 2015, there were twenty (20) amendments to various regulations utilized by the Planning Department. Some of these amendments go hand in hand, i.e. if one regulation is amended, another might have to be amended in order to achieve the desired result.

- There were thirteen (13) amendments to the 2013 Williamson County Zoning Ordinance.
- There were seven (7) amendments to the Williamson County Subdivision Regulations.
- There were no (0) amendments to the Williamson County Stormwater Regulations.
- There were no (0) amendments to the Williamson County Wastewater Regulations, which are a part of the Williamson County Zoning Ordinance.
- There were no (0) amendments to the Williamson County Planning Commission Bylaws.

Major Subdivisions

Major subdivisions are those consisting of three (3) or more lots. Under this category, there are Traditional Subdivisions, Conservation Subdivisions and Large Lot Easement Subdivisions. The following table details the activity related to major subdivisions for 2015. See Table 1 below.

Table 1

	Name	Section	Lots
1	Hidden Hills	Large Lot Easement	5
2	King's Chapel	Section 3C	5
3	Vogel	Large Lot Easement	1

4	Mistye Meadow Farms	Large Lot Easement,Reapproval	3
5	Dunblane	Revised	16
6	White Deer	Large Lot Easement	3
7	Temple Hills	Section 16, Phase C	30
8	Sequoia	Large Lot Easement	2
9	The Farms at Clovercroft	Section 1	29
10	Hideaway at Arrington	Section 1	2
11	Hideaway at Arrington	Section 2	98
12	King's Chapel	Section 5	28
13	King's Chapel	Section 7	37
14	The Grove	Section 7	68
15	Falls Grove	Section 2	85
16	Weatherford Estates		17
17	The Grove	Section 6, Revised	95
18	The Grove	Section 6, Revised	95

Minor Subdivisions

Minor Subdivisions consist of no more than two (2) lots. Where there are no bondable improvements required, Staff has the discretion to review and approve these plats. In 2015, Staff processed eighteen (18) Minor Subdivisions consisting of twenty-seven (27) lots.

Plat Revisions

Plat Revisions that contain two (2) or fewer lots are subject to review and approval by the Staff. There are many different items that may be dealt with on a revised plat, including a lot line shift. In 2015, Staff processed fifty-seven (57) plat revisions.

Non-Residential Site Plans – Planning Commission

The Planning Commission has reviewed a diverse range of non-residential site plans. In 2015, there were eleven (11) non-residential site plans reviewed. Table 2 outlines those plans reviewed.

Table 2

	Project Name	SF or AC	Comments
	Vineyard Valley	106 AC	Wastewater
1			Treatment/Disposal
			System
2	College Grove Elementary School	10,019 SF	Building Addition
3	Hideaway at Arrington	33,591 SF	Amenity Area
	Lookaway Farms	168.46 AC	Wastewater
4			Treatment/Disposal
			System
5	Arrington Vineyard Winery	60 AC	Increase Use Area
(Rural Retreat-
6	Battle Mountain Farms	226.26 AC	Extensive
7	Page Middle School	10,380 SF	Building Addition

8	The Farms at Clovercroft	0.7 AC	Amenity Center
	Fiddlers Glen	183.03 AC	Wastewater
9			Treatment/Disposal
			System
	Daventry	131.91 AC	Wastewater
10			Treatment/Disposal
			System
	The Enclave at Dove Lake	214.6 AC	Wastewater
11			Treatment/Disposal
			System

Minor (Staff Level Review) Site Plans

The Zoning Ordinance allows Site Plans for certain uses in certain Zoning Districts to be reviewed and approved by Planning Department staff, rather than by the Planning Commission. Table 5 lists those Site Plans approved at the staff level in 2015. None (0) of these required approval of the use as a Special Use by the Board of Zoning Appeals, while Planning Staff reviewed and approved the Site Plan.

Staff Level Site Plans

Table 3

	Type	SF or AC	Comments
1	Ansbach Artisans	2,037 SF	Retail Store
2	Cowgirl Skin Care & Spa	2,300 SF	Retail Store & Day Spa
3	Ivy Glen, Section 3 Amenity Area	34.5 AC	New Picnic Pavilion
4	Daily Dish	N/A	Lighting Plan
5	Mint Springs Farm (Rural Retreat-	2,510 SF	New Storage Building
	Extensive)		
	Surefire Fireworks	1,500 SF	Temporary Fireworks
6			Tent
7	Oakview Elementary School	4,032 SF	Learning Cottages
8	Daily Dish	325 SF	New Storage Area
9	Oak Valley Baptist Church	N/A	Wheelchair Ramp
10	Williamson County Parks & Recreation	N/A	Additional Trails
11	Karen Whitford Commercial Lot	1,118 SF	Retail Store
12	Christmas Tree Village	18,400 SF	Seasonal Sales

Grassland Village Special Area Plan

In 2013, Staff completed a draft Special Area Plan for the Grassland Village. The Plan was adopted by the Williamson County Regional Planning Commission in February 2014. The Grassland Village Special Area Plan is the third such plan to be developed for the County's four Villages. The planning process emphasized public involvement and included numerous public meetings as well as meetings with the Citizens Advisory Committee, which consisted of area residents, civic leaders, and business and property owners. The regulations for the new Grassland Village Zoning District were

adopted by the Williamson County Board of Commissioners in October 2015 and they were set to go into effect in January 2016.

Planning Goals for 2016

The Planning Department has established three primary goals for 2016. The first goal is to complete a revision to the County's Subdivision Regulations, which govern the subdivision of property within the unincorporated County. The second goal is to work with the Grassland community to finalize a set of tailored development (zoning) standards for the Village based upon the Grassland Village Special Area Plan. The third goal is to begin working with the Triune community to develop a Special Area Plan for the Triune Village.

Department of Codes Compliance

Introduction

Codes Compliance plays an integral role in maintaining the quality of life in Williamson County, assisting developers and the general public negotiating zoning and other regulations to the mutual benefit of both. This department is responsible for support of the Board of Zoning Appeals and other boards for the routine processes of administering and interpreting the Zoning Ordinance, issuing sign permits, zoning inspections, and for specific research as the need arises. Codes Compliance is the enforcement branch of the Community Development Office.

Codes Compliance is located on the 4th floor of the Administrative Complex, along with the Building Codes, Planning and Engineering Departments. Codes Compliance activities are directed by Lee Sanders, Codes Director, who is assisted by Linda Hodges, Michelle Jackson and Brenda Midgett.

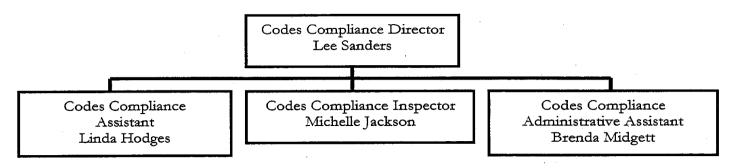


Table 4

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Board of Zoning Appeals Cases For	Total 2010	Total 2011	Total 2012	Total 2013	Total 2014
Total Agenda Items	16	21	13	16	16
Variances	8	13	5	4	3
Appeals	0	0	0	1	0
Special Uses	7	5	5	5	11
Other	1	3	3	6	2

Table 5
Special Uses By Category

Temporary Events of Public Interest	4	3	3	3	9
Craft Distillery	0	0	0	0	1
Light Industrial Construction Office	0	0	0	0	1

Board of Zoning Appeals Members for 2015
Dave Ausbrooks - Chairman
Steve Wherley - Vice Chairman
Don Crohan – Secretary/Representing the Planning Commission
Sue Workman - Regular Member
Karen Emerson-McPeak – Regular Member

Inspections

The Codes Compliance Department is also responsible for numerous inspections and related enforcement. Some of these inspections are based on zoning and building permit activity and some are initiated from complaints received from the public. Compliance inspectors are expected to initiate inspections of violations and non-permitted construction as they patrol the county.

Table 6

Activity		2011	2012	2013	2014
Online Form Submittals		66	59	49	40
Complaints Logged	147	160	133	141	125
Complaints/ No Violation Cited	42	35	39	50	57
General Code Violations = Complaints - No violation	105	125	94	91	68
Cases Closed This Year	140	144	131	77	144
Signs Removed *	527	287	360	404	406
Sign Violation Notices *	128	85	83	68	93
Sign Permits		76	69	64	50
Overgrown Lot Cases	46	32	23	17	16
Overgrown Lot Inspections	150	76	69	39	34
Pool Fence Inspections	135	158	162	162	171
Mobile Home and Replacement Inspections		56	42	6	24
Barn and Accessory Structure Finals – Zoning Permit.			28	33	52

Junk Car Cases	17	15	19	19	12
Junk Car Inspections	46	48	64	13	29
Department Phone Calls	1612	1587	1613	1715	1422

^{*} There were many signs placed in violation that were removed, but no notice was sent, either because of time limitations or inability to determine name/address of responsible party. Agreement was reached in 2008 allowing our office to administer the Williamson County Zoning Ordinance regulations in State rights-of-way, resulting in an increase in the number of unpermitted off-site signs picked up by staff.

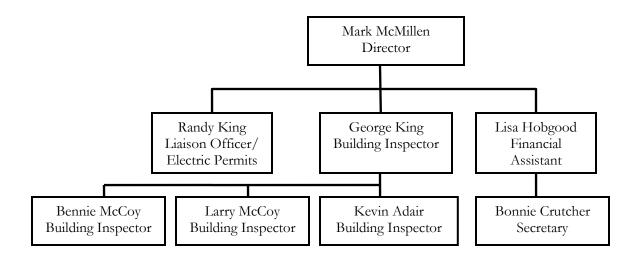
Department of Building Codes

Introduction

Serving a necessary role in the development of Williamson County, the Department of Building Codes insures that all construction within the unincorporated areas of the County meets current building codes adopted by the Board of Commissioners.

Organization

Grouped under Community Development with Codes Compliance, Engineering, Sewage Disposal Management, and Planning, the Building Codes Department is directed by Mark McMillen.



Building Permits

The following shows Building Permits and valuation for the past nine (9) years issued in the unincorporated area of Williamson County. See Table 7 and Figures 2 and 3 below. The total number of inspections for 2014 was 4,765.

Table 7				
Year	New SFR	Valuation	Total Permits	Valuation
2014	426	\$185M	762	\$208M
2013	433	\$158M	814	\$189M
2012	240	\$77M	596	\$113M
2011	157	\$49M	505	\$82M
2010	129	\$42M	610	\$71M
2009	139	\$54M	483	\$92M
2008	193	\$79M	636	\$131M
2007	322	\$157M	781	\$187M
2006	448	\$188M	865	\$221M

Figure 2

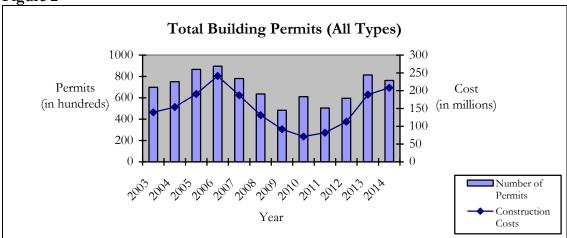


Figure 3



Adequate Facilities Tax

Officially referred to as Privilege Tax, this tax is assessed on new residential and commercial structures to offset the cost of growth on the County's infrastructure.

Building Codes has the responsibility of assessing and collecting this tax for both the unincorporated area of the county as well as for the cities of Brentwood, Franklin, Nolensville, and Spring Hill. These funds, once collected, are deposited with the County Trustee.

Effective July 1, 2007, the County Board of Commissioners enacted a new "Adequate Facilities Tax" (AFT) in schools. This additional \$1.00 per square foot is devoted solely to construction of new schools and is collected on new residential structures only.

All new County residential construction is assessed at \$2.00 per square foot, including areas that may be completed at a later date. Areas not included are unfinished basements, garages, carports, porches and accessory structures. All County commercial structures under roof are computed at \$0.34 per square foot. This includes areas such as bank drive thru, covered service station islands and material storage areas. City residential construction is also assessed at \$2.00 per square foot. The distributions of residential and commercial revenues are listed in Table 8, and Figures 4 and 5 below.

Table 8 County Residential Revenue Distribution		Commercial Revenue Distribution		City Residential Revenue Distribution	
Purpose	Amount	Purpose	Amount	Purpose	Amount
Schools*	\$0.70	Roads	\$0.30	Schools*	\$0.92
Roads	\$0.20	Fire Protection	\$0.04	Parks/Rec	\$0.08
Parks/Rec	\$0.08				
Fire Protection	\$0.02				

^{*}Does not include \$1.00 per square foot for the new Adequate Facilities Tax (AFT).



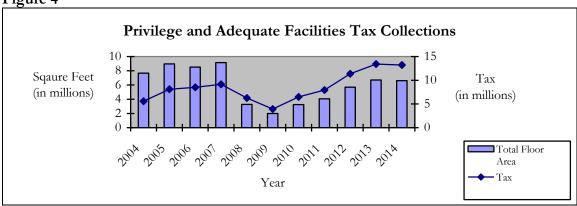
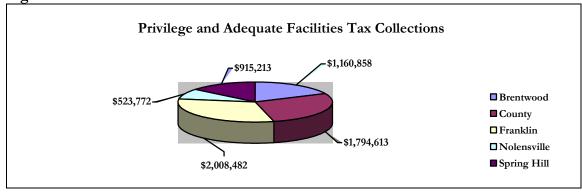


Figure 5



Electrical Permits

Beginning in December 2010, the Building Codes Department commenced the sale of electrical permits. These permits are valid for all jurisdictions within Williamson County except the City of Franklin. The electrical inspections themselves will continue to be conducted by contract employees of the Tennessee State Fire Marshall's office. The addition of this service should offer further convenience to those seeking building permits within the unincorporated County. In addition to his liaison duties, Randy King is the lead Staff member for the sale of electrical permits. These permits will be available from 8am-12pm Monday through Friday at the Building Codes Department.

Goals

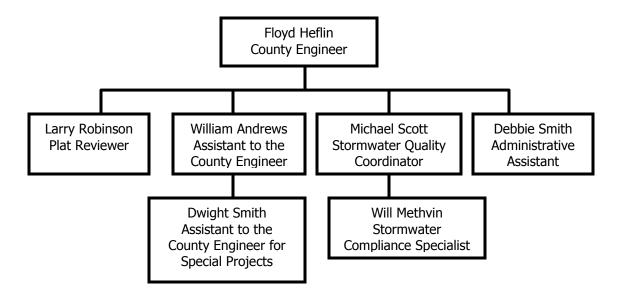
Construction of new homes county-wide has increased back to levels we saw in 2006, which is a great sign of recovery in economic stability for our County. In 2015, we will strive to continue a professional level of service to the building community while meeting Building Code requirements that are constantly changing due to Federal Government mandates, especially on the Energy Code. The State of Tennessee now mandates that all inspectors be certified in all areas of inspections performed. We strive to do more with less staff to save tax-payer dollars by having inspectors certified and licensed by the State in Building, Plumbing, Mechanical and Energy. Certification is renewable in 3-year periods by achieving 36 hours of State-approved continuing education in all areas of certification.

Department of Engineering

Introduction

County Engineering works to maintain the quality of development in Williamson County while assisting developers and the general public in interpreting development regulations and implementing associated requirements. This Department is responsible for support to the County Commission, Storm Water Appeals Board, Highway Commission, Planning Commission, and other boards for the routine processes of administering and interpreting the Storm Water Management Regulations, Subdivision Regulations, Zoning Ordinance, FEMA (Federal Emergency Management Agency) Regulations, engineering practices, and for specific research as the need arises.

County Engineering is located in Community Development along with Building Codes, Codes Compliance, Sewage Disposal Management, and County Planning. Engineering activities are directed by Floyd Heflin, P.E., County Engineer, who is assisted by William Andrews, Dwight Smith, Michael Scott, Larry Robinson, Will Methvin and Debbie Smith.



Overview

The Engineering Department is an essential part of the Community Development team. One of the main duties of the Department is to review and approve all construction plans for new development. This review now includes storm water quality requirements imposed by our Municipal Separate Storm Sewer System (MS4) permit with the Tennessee Department of Environment and Conservation (TDEC), Division of Water Resources. Delineation and platting of areas required for on-site sewage systems is also coordinated with Sewage Disposal Management. Letters of Credit for approved construction projects are estimated and established. When on-site storm water detention is neither possible nor practical for these developments, funds in-lieu-of detention may be levied, and placed in an account for use on community storm water management

projects of greater magnitude. Surety for public improvements is reviewed and field inspections are performed on work in progress to assess compliance.

Other responsibilities vary from coordination of infrastructure testing and outside consultants, to assisting County residents with drainage and erosion control issues. Additionally, traffic and roadway issues, floodplain management, storm water enforcement, and various engineering-related concerns are addressed daily. The Engineering Department coordinates with the Highway Department, as required, concerning new development affecting County maintained roadways. Land Disturbance permits are also issued from the Engineering Department after review and approval of grading, drainage, and erosion control plans.

Surety

The Engineering Department establishes surety amounts for roads, drainage, and erosion control. Letters of Credit for new development are received at the final plat stage as required by the Planning Commission. Letters of Credit help insure proper performance during construction, and high infrastructure quality upon completion. Currently, the Engineering Department administers Letters of Credit totaling \$12,473,000 for roads, drainage and erosion control. In 2015, 1.851 miles of roadway were released from surety and accepted by the Highway Commission and County Commission for addition to the County road system. An additional 0.532 miles of roadway were released from surety for maintenance by Home Owners Associations. William Andrews coordinates the assessment and review of infrastructure surety.

Land Disturbance Permits

Any activity disturbing one acre or more of land, or adding 10,000 square feet or more of impervious surface, must provide a site specific erosion control plan and obtain a land disturbance permit. Additionally, individual lots, which are part of a larger plan of development, are also regulated if the entire development disturbs one (1) acre or more of land. During 2015, 420 permits were issued for individual lots at a cost of \$150 per permit, while 19 permits were issued for subdivisions or non-residential site plans at a cost of \$300 per permit. Total Land Disturbance Permit fees equaled \$68,700.

Blasting Information

Although no permit is issued by the County, applicants are required to disclose the purpose and extent of blasting activity, when the blasting will occur, and how the blasting will be supervised. Relevant safety measures required to protect the surrounding property owners from sustaining damages should also be discussed. The applicant is also required to provide this office with a certificate of insurance stating the extent of their coverage. Blasting is regulated by the State Fire Marshall's Office.

Floodplain Management

In 2015, the Engineering Department finalized its participation in Phase III of the FEMA Hazard Mitigation Grant Program (HMGP) allowing the purchase and removal of three flood prone properties. The total closure amount was under budget at \$675,859. Funds for this grant were made available after the May 2010 floods, and properties in this phase had experienced repetitive flood losses and met certain benefit/cost criteria established by the Federal Emergency Management Agency (FEMA). As with the previous grant, Phase III provided an 87.5% match while the Counties portion was 12.5%. Structures acquired have been demolished, and the properties will be owned in perpetuity by the County as open space. Certified Floodplain Managers (CFMs) on staff

continue to assist the public on a daily basis and determine the conditions under which proposed improvements may occur in our Special Flood Hazard Areas.

The Engineering Department is representing the County in the Harpeth Basin Feasibility Study with the Army Corps of Engineers. The Corps approached the County and other potential local sponsors after the May 2010 flooding with the goal of updating hydraulics and hydrology for the entire Harpeth Basin. An interim report was generated in September that analyzed various alternatives for flood reduction in the Harpeth Watershed. While none of these alternatives met benefit cost criteria to warrant projects in the un-incorporated County, the data generated will be used to reduce flood risk through improved floodplain management tools. Currently, the County has earmarked \$50,000 in this effort, and is working with the Corps, the City of Franklin, the City of Brentwood, and Metro Nashville, Davidson County.

As a result of the 11/12/14 Verification Visit by the National Flood Insurance Program (NFIP) Community Rating System (CRS) the County was upgraded to a Class 8 Community. The County's participation in this program allows a 10% discount on certain flood insurance premiums paid after October 1, 2015. The County receives CRS credit for maintaining a Multi-Hazard Mitigation Plan, performing community outreach to our repetitive loss areas, preserving floodplain as open space, and managing flood plain delineation and development. The Engineering Department works with Emergency Management to maintain a current mitigation plan so we will continue to be eligible for future grant opportunities. The un-incorporated County has approximately 228 structures within about 10,120 acres of mapped Special Flood Hazard Area.

Storm Water Quality and Watershed Protection

Williamson County is required by the Tennessee Department of Environment and Conservation to have a Phase II National Pollutant Discharge Elimination System (NPDES) MS4 permit for storm water. Requirements of the permit include controlling construction site runoff and elicit discharges, and include an annual permit fee of \$3,460. Other components involve public education, community involvement, and enforcement. While compliance is the goal of the program, \$68,400 in storm water penalties were collected during 2015.

Permit compliance is managed by Michael Scott who also coordinates the agenda of the Storm Water Appeals Board. This Board meets monthly as needed to hear appeals of the Storm Water Management Regulations. Nine (9) appeals were heard in 2015 representing **\$900** in application fees. An additional five (5) appeals were made to the County Engineer.

Williamson County is currently performing stream monitoring on impaired waters that are referenced by TDEC's 303d list as possibly impaired from MS4 discharges. So far, chemical and/or biological samples have been taken on the Harpeth River, Little Harpeth River, Rutherford Creek and Owl Creek. The goals of the sampling activities are to assist in determining the health of the waterways by monitoring various indicators over time.

As part of our storm water public education and outreach, Williamson County has developed a "Guide to Waterway Natural Areas" which explains our stream buffer requirements, and was distributed to property owners along portions of impaired streams. Additionally, Williamson County conducted a public stream clean-up on the Harpeth River. Other educational outreach activities include:

- Participation with the City of Brentwood in an annual event to educate local high schools about storm water related topics,
- Public Service Announcement broadcasts,
- Maintaining storm water information on the County website.

Additional Storm Water Quality Control activities performed include:

- Implementation of new State Runoff Reduction standard for water quality at new developments,
- Pollution prevention and good housekeeping inspections at County facilities/operations,
- Dry weather screening of the County's storm sewer systems,
- Maintaining GIS inventory of active Land Disturbance Permits and post construction BMPs and tracking compliance.

Department Goals for 2016

As always, it is the desire of the Engineering Department to continue working in a cooperative effort with other Departments, elected officials, and County residents to promote and protect the health, safety, and welfare of all citizens and to enhance the environment and infrastructure of Williamson County. Specifically, we will continue to improve our Water Quality program utilizing data from our sampling and analysis program as required by our State permit. We will further our efforts to provide premium discounts for the residents of Williamson County under the Community Rating System by continued application of our flood plain requirements, and will utilize more accurate hydrologic information on the Harpeth River watershed through our participation in the Harpeth River Feasibility Study. Engineering, and Community Development as a whole will also be working to improve our application, plan review, and inspection processes through the implementation of new software systems.

Department of Sewage Disposal Management

Introduction

The Department of Sewage Disposal Management is charged with the task of ensuring that the laws of Williamson County regarding the use and placement of individual, on-site subsurface sewage disposal systems (i.e., septic systems), are fairly implemented and enforced so as to protect the:

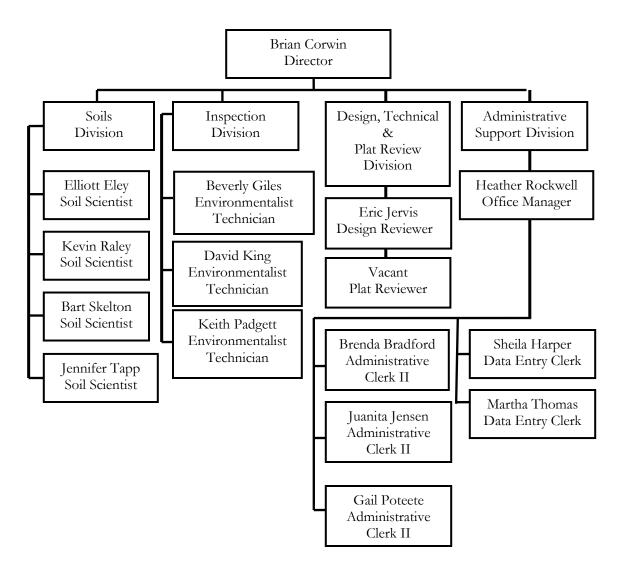
- health and well-being of the general public;
- irreplaceable groundwater and surface water resources of the County; and
- quality of the environment which the citizens of the County enjoy.

The Department is empowered to regulate subsurface sewage disposal in accordance with Tennessee Code Annotated Title Sixty-Eight, Chapter Two Hundred Twenty-One, Part Four. In January of 1993, pursuant to provisions outlined in said code, Williamson County chose to enter into and executed an agreement (i.e., contract) with the Tennessee Department of Environment and Conservation (TDEC) to implement the provisions of this part of the state code in its area of jurisdiction. Additionally, the Department is governed by the Board of Health of Williamson County. The ten members of the Board of Health have the power to promulgate all regulations, rules and policies of the Department, and grant variances of such rules when deemed appropriate and necessary.

Williamson County Government has jurisdiction over all proposed or existing septic system installations within the boundaries of Williamson County. In addition to the lands governed by the County, this jurisdiction also includes all land areas contained within the boundaries of the incorporated cities and towns, which lie within the County. Thus, the Department of Sewage Disposal Management is the agency charged with the implementation, interpretation, and enforcement of the regulations. In addition to the State of Tennessee's Rules of the Department of Environment and Conservation, Division of Groundwater Protection (TDEC-GWP); Chapter 1200-1-6: Regulations to Govern Subsurface Sewage Disposal Systems, the County adopted its own set of rules in May 2000. Effective in October of the same year, the Regulations Governing On-Site Sewage Disposal Systems of the Williamson County Department of Sewage Disposal Management are no less stringent, and in many respects are more stringent, than the state regulations.

Our office is located on the fourth floor of the Williamson County Administrative Complex in Suite 411. Brian K. Corwin is the Director and is assisted by Office Manager, Heather Rockwell. The Department staff is divided into four (4) groups: Soil Scientists, Inspectors, Design and Plat Review, and Administrative Support.

Department Organizational Chart



Board of Health Members

The Williamson County Board of Health is composed of ten members including Chairman and County Mayor Rogers Anderson, Dr. Charlie Beauchamp, Cathy Montgomery, Cyndy Howes, Martin Myers, III, Dr. Gary Owen, Rhonda Watson, Dr. C.A. Stillwell, Jorja Trocino, and Dr. Joseph Willoughby.

Department Overview & Quantitative Data

In order to carry out our mission, the Department is directly involved and oversees every aspect associated with on-site subsurface sewage disposal within the County limits. This "cradle-to-grave" approach begins with the earliest phases of property development, continues through final system installation and on throughout the life of the system. The implementation of this process encompasses much more than simply permitting systems. It involves every aspect associated with the permitting process and in essence has evolved into a form of quality control to ensure the

protection of public health and the environment with regard to sewage disposal. These Departmental responsibilities and processes, and their statistics, are further explored in the following paragraphs.

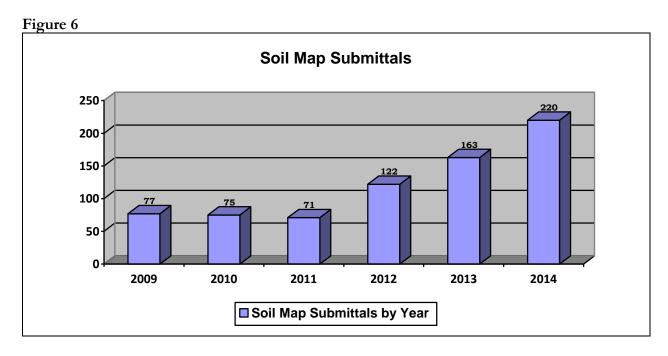
Soil Assessment

Soil assessment involves the processes, practices and techniques utilized to evaluate the soils on a parcel of land to determine whether or not those soils will support the installation of a subsurface sewage disposal system. These soil assessment methodologies include soil mapping, percolation tests and general soil surveys. The Department's soil scientist staff manages this aspect of the program. Part of this responsibility includes the review and approval of all soil maps and percolation tests submitted by independent consultants for conformance with the regulations, as well as with accepted soil science standards.

Soil Maps

The Department did not complete any preliminary soil investigations or soil maps in 2014. In 2013, the Department received one application for a preliminary soil investigation as compared to one in 2012, four in 2011, one in 2010, and four in 2009. According to fees collected, the soils division completed six soil maps in 2013 covering approximately seven acres. The Department completed four soil maps in 2012 covering four acres, six soil maps in 2011 covering seven acres, three soil maps in 2010 covering three acres, seven soil maps totaling 5.25 acres in 2009, and seven in 2008.

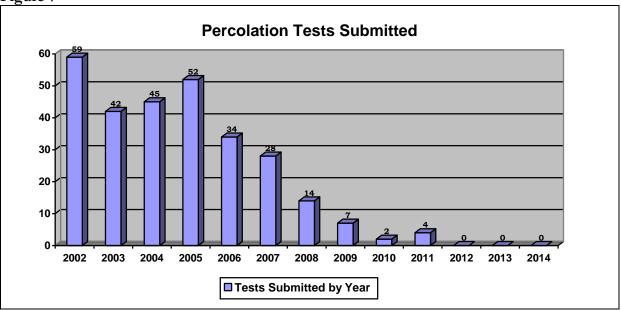
Responsibilities of Department Soil Scientists also include on-site verification of soil maps submitted by private soil consultants. In 2014, the soil scientist staff verified 220 soil maps, a 35% increase over 2013 numbers. In 2013, 163 soil maps were verified by Department staff, a 33.6% increase over the previous year. The Department reviewed 122 soil maps in 2012, 71 in 2011, 75 in 2010 and 77 in 2009. See Figure 6 below.



Percolation Tests

Although much more sophisticated and accurate methodology is available for soil evaluation, percolation tests are still accepted in limited situations for property development. In 2011, only four percolation tests were received for evaluation by the Department versus two in 2010 and seven in 2009. In 2012, 2013, and 2014, no percolation tests were submitted to the Department. See Figure 7.





Property Development

Utilizing the soil assessment information, a land parcel can then be evaluated for suitability for the use of subsurface sewage disposal systems. Department staff oversees this process for both platted and un-platted parcels of land. This involves working with independent consultants (e.g., surveyors, engineers, etc.) on everything from lot configuration, to the determination of system type, to area sizing and setback requirements, among a multitude of other things. These responsibilities include the review and approval of subdivision plats (and their revisions) for adherence to all applicable laws and regulations.

Subdivisions and SSDS Location Maps

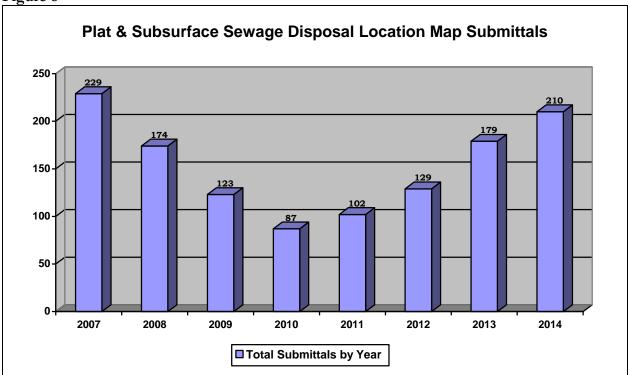
Any proposed subdivision of land which requires the use of subsurface sewage disposal systems, or any individual lot of any size which requires location of suitable septic areas in order to be deemed build-able, must be reviewed and approved by the Department. The resulting Subdivision Plat (which also requires concurrent review and approval by the Planning Department), or Subsurface Sewage Disposal System Location Map, must be recorded in the Register of Deeds Office before Permits for Construction of Subsurface Sewage Disposal Systems can be issued.

The Department collected \$38,125 in review fees in 2014. Those fees represent 210 Final Plat and Subsurface Sewage Disposal System Location Map submittals, containing 301 individual lots, a 17.3% increase over 2013 submittals, and a 26.5% increase in individual lots reviewed. In 2013, the Department collected \$29,750 in review fees representing 179 Final Plat and Subsurface Sewage

Disposal System Location Map submittals containing 238 individual lots, a 38.8% increase over 2012 submittals, and 42.5% increase in individual lots reviewed.

The Department collected \$20,875 in review fees in 2012, representing 129 submittals containing 167 individual lots. In 2011, \$19,375 in review fees were collected, representing 102 submittals containing 155 individual lots. In 2010, \$14,750 in review fees were collected for 87 submittals and 118 lots. \$23,750 in review fees were received by the Department in 2009 to review 123 submittals and 109 lots. These statistics do not include Preliminary Plat reviews, Sketch Plan reviews, or reviews of re-submittals required to rectify errors and omissions. See Figure 8 following.





Alternative & Experimental System Designs

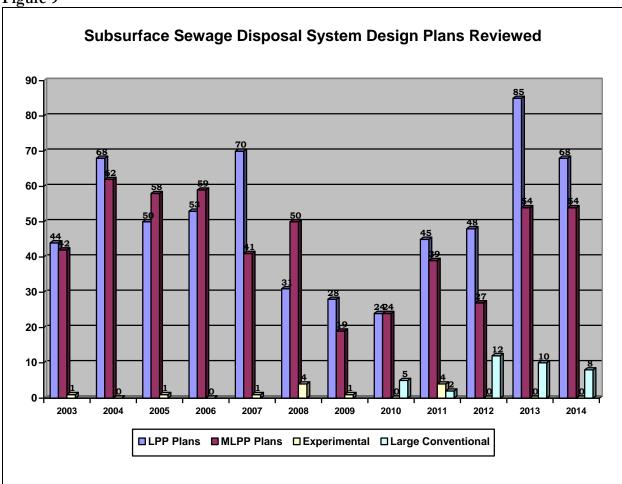
All alternative and experimental on-site wastewater systems are required to be designed by a licensed engineer. The Department's design review staff oversees the review and approval of all system design plans for conformance with the regulations, as well as with accepted engineering practices and standards.

Three types of alternative systems are utilized in Williamson County; standard Low Pressure Pipe (LPP) systems not requiring soil modification; Modified Low Pressure Pipe (MLPP) systems requiring soil modification; and Mound systems. The use of experimental systems is rare and restricted to repair purposes only, where proper soil conditions do not exist for installation of a code compliant system. In addition, conventional systems serving structures with a wastewater flow in excess of 750-gpd are considered "large" conventional systems, and must be designed by a licensed engineer.

The Department reviewed 130 system design plans in 2014, a 14.6% decrease over last year's 149, which was a 71.3% increase over 2012 numbers. Of the 130 reviewed this year, 68 were LPP systems, 54 were MLPP systems, and 8 were large conventional systems. No experimental system design plans were submitted in 2014. Eighty-seven plans were reviewed in 2012, 90 in 2011, and 53 in 2010. See Figure 9 following.

In 2014, 111 (85.4%) of the 130 total plans reviewed required revisions; and 20 (18%) of the 111 required a second round of revisions. In 2013, 112 or 75.2% required revisions; and 23 of the 112, or 20.5% required a second round of revisions. In 2012, 86% required revisions and 17% required second revisions. In 2011, 81 plans (approximately 90%) required revisions, compared to 45 plans (approximately 85%) in 2010 with 47% of those requiring at least a second round of revisions.





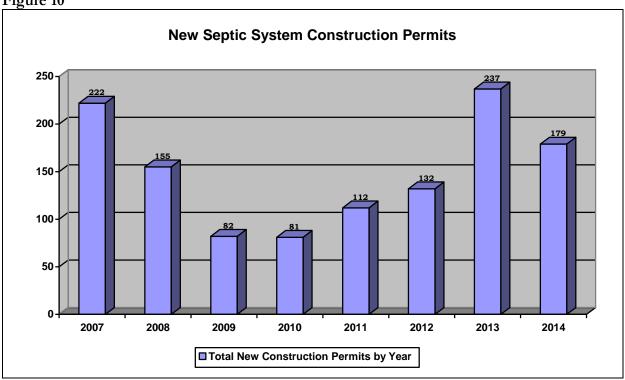
Construction Permits

The Department not only issues permits for the construction of new subsurface sewage disposal systems, but also for the upgrade or enlargement of existing systems, and the repair and/or replacement of malfunctioning and failing systems. In addition to the above-noted processes associated with permitting new systems, Department personnel are also involved with the evaluation of individual site plans and building floor plans to ensure that a proposed structure is in compliance with applicable rules, regulations and approvals. For existing systems that are failing and

malfunctioning, Department personnel are charged with investigating, evaluating and prescribing remedies to fix those problems.

Anyone constructing, altering, extending, modifying, or repairing, either alternative or conventional subsurface sewage disposal systems within Williamson County, must hold a valid *Construction Permit* issued by the Department. The recipient of a *Permit for Construction* of a system (i.e., the property owner or builder) is held responsible for adhering to the construction requirements of the *Regulations*. In 2014, new construction permit activity (179 total permits) decreased 24.5%, from 237 in 2013. The Department issued 132 construction permits in 2012, 112 in 2011, and 81 in 2010. See Figure 10.

Figure 10



Through a series of steps, the Department determines the type of septic system that is appropriate for use with the construction of a new structure, and for expansion or modification of an existing structure. System type is determined by the soil conditions of the property, number of bedrooms in the structure, and whether or not oversized bathing fixtures will be included in residential construction; commercial structures are evaluated by proposed use and other factors. New conventional septic system construction permits (84) represented 46.9% of the total 179 new construction permits issued in 2014. In 2013, conventional septic systems represented 51.9% of all new construction, versus 50.8% in 2012, 52% in 2011, 59% in 2010, and 61% in 2009.

The number of new construction permits which included oversized tubs continued the upward trend, which began in 2009, when new permits with standard tubs (56%) surpassed permits with oversized tubs (44%). The majority (68.7%) of new construction permits issued in 2014 included oversized Jacuzzi or garden tubs. 56.9% of new construction permits issued in 2013 included

oversized Jacuzzi or garden tubs. New construction with oversized tubs represented 62.1% in 2012, 55.4% in 2011, 50.6% in 2010, and 43.9% in 2009.

See Figures 11 and 12 following.

Figure 11

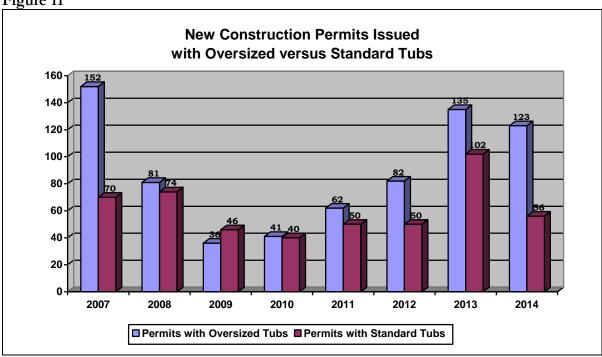
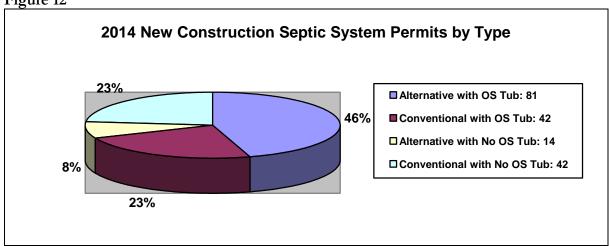


Figure 12



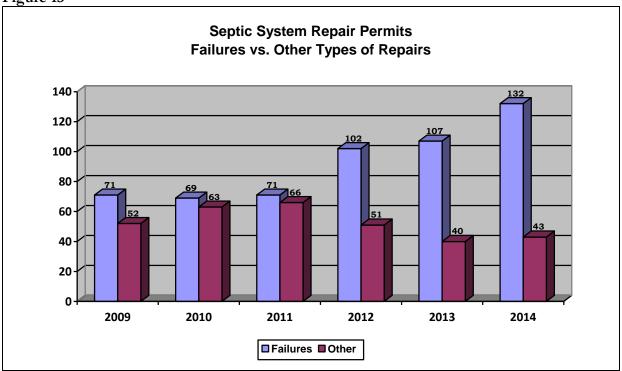
The Department has equal authority over the repair of existing systems, which may be required for a variety of reasons including upgrading non-conforming systems due to remodels and expansions of structures, and repairing failing systems, which may be a threat to public health and/or the environment. According to fees paid in 2014, 175 repair permits were issued, a 19% increase over 2013. Of those 175, 132 (75.4%) were issued to repair failing systems, and 43 (24.6%) were issued for other reasons. Seventy-three (55.3%) of the systems requiring permits for failures were

Conventional systems, 35 (26.5%) were LPP, and 24 (18.2%) were MLPP. Of the 43 Repair Permits that were issued for other reasons, 26 (60.5%) were Conventional, 10 (23.3%) were LPP, and 7 (16.2%) were MLPP.

In 2013, 147 repair permits were issued; 107 (72.8%) of those permits were issued to repair failing systems, and 40 (27.2%) were issued for other reasons. Of the 107 repair permits issued for failures, 59.5% were Conventional, 26.7% were LPP, and 13.8% were MLPP. Of the 40 systems requiring permits for other reasons, 71.8% were Conventional, 25.6% were LPP, and 2.6% were MLPP.

Of the 153 repair permits issued in 2012, 102 or 67% of those permits were issued to repair failing systems; and 51 or 33% were issued for other reasons. Of the permits issued for failures in 2012, 61 or 59.8% were conventional, 25 or 24.5% were LPP, and 16 or 15.7% were MLPP. In 2011, 137 repair permits were issued. Seventy-one, or 52% of those permits were issued to repair failing systems; and 66, 48% were issued for other reasons. In 2010, 132 repair permits were issued. Sixty-nine or 52% of those permits were issued to repair failing systems, and 63 or 48% of permits were issued for other reasons. In 2009, 71 or 58% of repair permits were written for failures and 52 or 42% for other reasons, totaling 123 repair permits. In 2007 and 2008, repair permits issued numbered 192 and 178 respectively. See Figure 13 below.



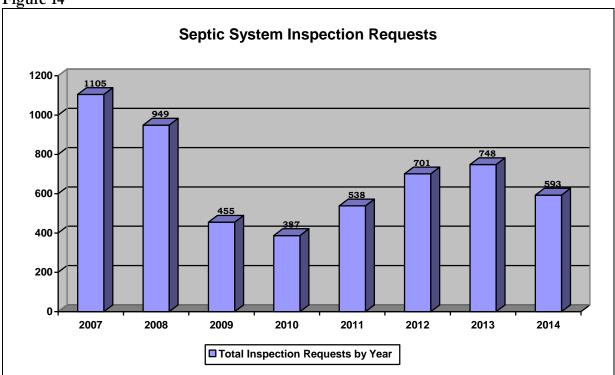


System Inspections

During the actual installation of new systems and the repair, modification or upgrade of existing systems, the Department's inspection personnel oversee all construction related activities. System installations must be supervised from start to finish and the *County Regulations* detail a very rigorous inspection process at various stages throughout the installation to ensure adherence to all applicable regulations, permit details and construction standards. The number of inspections required depends

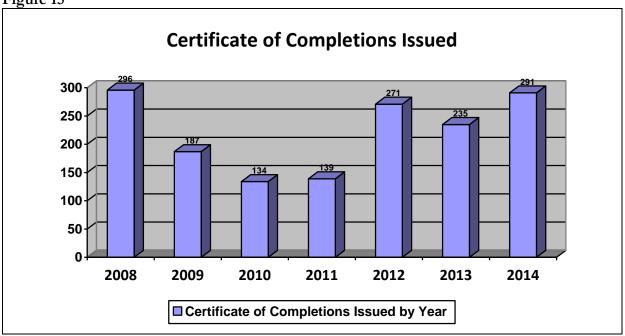
upon the complexity of the system or repair. In 2014, 593 inspections were formally requested versus 748 in 2013, and 701 in 2012. In 2011, 538 inspections were requested, versus 387 in 2010, 455 in 2009, 949 in 2008, and 1,105 in 2007. In 2014 an average of 2.3 inspections were formally requested per day, versus an average of 3.03 inspections per day last year. These figures do not include inspections not called in to the Department's inspection coordinator, and repeat inspections. They also do not include inspections of septic tank abandonments for properties hooking to sewer. See Figure 14.

Figure 14



After all inspections are completed and final approval is granted to a system installation, whether new or repaired, the Department will issue a *Certificate of Completion*. In 2014, approximately 291 Certificate of Completions were issued by the Department, versus approximately 235 in 2013, 271 in 2012, 139 in 2011, 134 in 2010, 187 in 2009, and 296 in 2008. Only after issuance of such certificate may a property owner receive a *Certificate of Occupancy* for that structure from the Building Codes Department. See Figure 15 following.

Figure 15

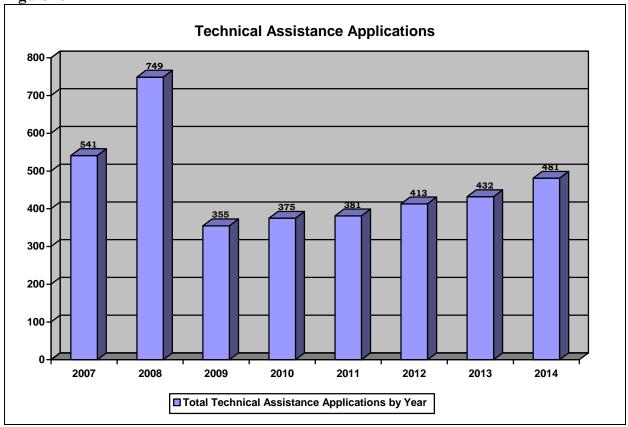


Other Department Services

Any modification to a property serviced by a subsurface sewage disposal system in Williamson County automatically triggers the completion of a *Technical Assistance Application* with the Department, an on-site inspection by a Department staff member, review of pertinent documentation, and approval by the Department, whether or not an actual septic permit is required. Typical modifications include projects such as swimming pools, attached or detached garages, out buildings (e.g., sheds, barns, etc.), sunrooms, patios, decks, porches, and other minor external or internal remodeling or cosmetic improvements.

In 2014 the number of *Technical Assistance Applications* continued to rise, following a persistent trend upwards since the dramatic drop of 53% in 2009. In 2014, the Department processed 481 *Technical Assistance Applications*, an 11.3% increase over 2013's 432. Seven hundred forty-nine applications were processed in 2008. Four hundred thirteen were processed in 2012, 381 in 2011, 375 in 2010, and 355 in 2009. Five hundred forty-one applications were received in 2007. Refer to figure 16 following.

Figure 16



Included in the Technical Assistance group are two community services the Department provides for the convenience of the public. One of these, system recertification, has become increasingly important in the past few years because of recent state legislation placing liability on realtors, or sellers of real estate, for the misrepresentation of compatibility of a home's size (i.e. number of bedrooms) with its septic system permit restrictions. In both 2013 and 2014, the Department received 15 Recertification Applications versus 18 in 2012, 25 in 2011, 34 in 2010, 40 in 2009, and 30 in 2008.

The second service, collecting and processing water samples for the purpose of identifying various contaminants in wells, springs and other private drinking water sources, requires the on-site collection of a sample by a Department Inspector. Processing of the specimen is completed by a state laboratory within seven to ten days, which is followed by written notification of the results to the applicant. No water samples were requested in 2014. Three water samples were gathered by the Department for analysis in 2013, versus only one in 2012, seven in 2011, six in 2010, and three in both 2009 and 2008.

The Department provides a number of services that do not have fees directly associated with them. Sometimes these services are requested as a result of natural phenomena. Homeowners who have suffered losses due to fires, floods, or tornadoes are not charged fees to process permits to repair or rebuild their homes. Since the February 2008 tornado, the number of applications for reconstruction due to storm damage has steadily decreased each year. The Department processed no applications in 2013 and 2014, one in 2012, one in 2011, three in 2010, and five in 2009.

Likewise, construction due to flood damage has been minimal since the devastating flood of 2010. The Department processed 66 applications for construction due to flood damage in 2010, four in 2011, one in 2012, and none in 2013 and 2014.

Two applications in 2009 for construction due to fire damage were processed, seven in 2010, five in 2011, seven in 2012, and one in 2013. Six applications were made in 2014 for construction due to fire damage.

Additionally, homeowners hooking to sewer and abandoning their septic systems must comply with County Regulations specifying the manner in which the tank is rendered unusable, in order to address public health concerns. Although verification of proper abandonment procedures is required, no fees are assessed to homeowners for inspections of abandoned tanks. In 2014, approximately twenty tank abandonments were completed with five attributed to the joint Williamson County/City of Franklin project begun in 2009 to extend sewer to the Grassland and Meadowgreen areas. Thirty-three tank abandonments were inspected in 2013. Of those, 12 (36.4%) were part of the Grassland sewer project. The remaining 21 inspections can be attributed to other subdivisions annexed into the City of Franklin. Forty-eight tank abandonments were inspected in 2012. In 2011, because of the inception of the Grassland/Meadowgreen sewer project, 81 tank abandonment inspections were done by Department staff, a drastic increase from 2010's 11 tank abandonment inspections. See Figure 17 below.

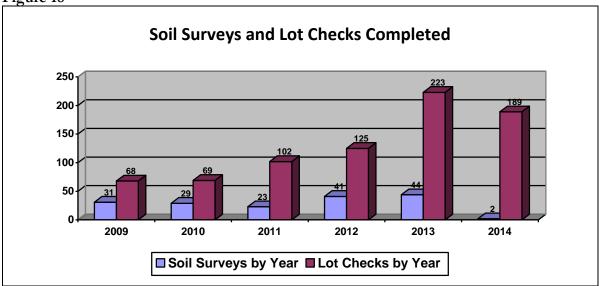
Tank Abandonments ■ Septic Tank Abandonments by Year

Figure 17

Finally, lot checks, flagging of existing systems, field sketches of sites, etc., are services often required during the review of Plats or SSDS Location Maps; and, soil surveys are performed by the Department for landowners who meet certain criteria and want to build residences for themselves

on their own properties. Fees for these services are not charged individually, but rather are included as a portion of permit or plat review fees. In 2014, the Department completed approximately 189 lot checks compared to 223 in 2013, 125 in 2012, 102 in 2011, 69 in 2010, and 68 in 2009. Department staff completed 2 soil surveys in 2014, 44 in 2013, 41 in 2012, 23 in 2011, 29 in 2010, and 31 in 2009. See figure 18 following.

Figure 18



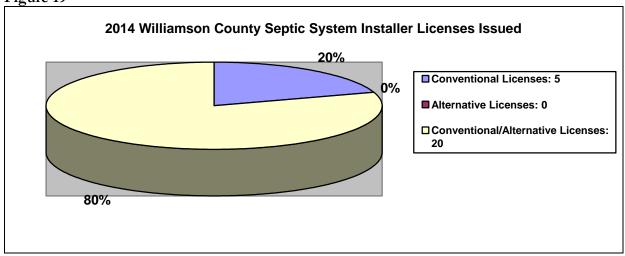
Licensing of Septic System Installers

Construction, modification, or repairs of subsurface sewage disposal systems within Williamson County may only be conducted by persons holding valid installers' licenses and identification cards issued by the Department of Sewage Disposal Management. The Department issues three types of installer licenses: Conventional, Alternative, and Conventional/Alternative. Persons wishing to be licensed in Williamson County must:

- Obtain the corresponding licenses through the Tennessee Department of Environment and Conservation, Division of Water Resources (TDEC-WR);
- Provide a Letter of Credit or Surety Bond;
- Pay an annual license fee;
- Demonstrate thorough knowledge and understanding of the Department's Regulations Governing On-Site Sewage Disposal Systems; and
- Successfully complete a probationary period under the direct supervision of the Department.

Installers must renew their licenses with TDEC-WR and the Department annually. In 2014, 25 installer licenses were issued, of which five were conventional only, and 20 were conventional and alternative combined. In 2013, 23 installer licenses were issued, of which nine were conventional only, and 14 were conventional and alternative combined. In 2012, 24 installer licenses were issued, of which nine were conventional only, and 15 were conventional and alternative combined. In 2011, the Department issued 22 installer licenses, of which six were conventional only, two were alternative only, and 14 were conventional and alternative combined. Nineteen installer licenses were issued in 2010 and 2009. Twenty-seven installer licenses were issued in 2008. Please see Figure 19 following.

Figure 19



Pumpers

The Department has regulatory authority over all septic tank pumping contractors conducting business in Williamson County. This includes the permitting of individuals allowed to conduct such operations as well as oversight to ensure the proper disposal of all collected septage. Although the Department does not require a separate County license for pumping contractors to operate in Williamson County, they are required to provide the Department with a valid copy of their state Septic Tank Pumper Permit issued by the Tennessee Department of Environment and Conservation, Division of Water Resources (TDEC-WR). Additionally, they are required to file with the Department a valid copy of their Wastewater Discharge Permit for Wastewater Haulers with a wastewater treatment facility approved by TDEC-WR.

Miscellaneous

The Department also has regulatory authority over all product and technology approvals proposed for use in conjunction with on-site wastewater systems in Williamson County. Department staff reviews such proposals on an individual, case-by-case basis.

2014 Commendations

In 2014, several Department employees reached goals, participated in activities, and received industry recognition worthy of acknowledgement.

Soil scientists Elliott Eley, Bart Skelton, and Jennifer Tapp maintained their Licensed Professional Soil Scientist statuses through the Tennessee Department of Commerce and Insurance.

Kevin Raley is also a licensed soil scientist in the State of Tennessee. In 2014, he renewed his certification as Certified Professional Soil Scientist through the Soil Science Society of America. He serves on the Soil Scientist Advisory Committee for the state soil scientist licensing program, appointed by the Commissioner of the Tennessee Department of Commerce and Insurance. He was appointed as Chair Elect of the Council of Soil Science Examiners (CSSE) in 2013. The CSSE is responsible for the development of both the Fundamental and Professional Practice Examinations used for certifying and licensing soil scientists nationwide. In 2014, Mr. Raley was elected to serve

as President of the Tennessee On-Site Wastewater Association (TOWA), and was chosen to be Conference Chairman for the 2015 Annual TOWA Conference.

Director Brian Corwin continued representing the Middle Tennessee area on the Tennessee On-Site Wastewater Association (TOWA) Board of Directors. This is his fifteenth consecutive year serving on the TOWA board, with past positions including Secretary, President, Treasurer and Regulator Representative. Mr. Corwin remained the Secretary and Treasurer for The Tennessee Section of the American Society of Agricultural and Biological Engineers, a position he has held since 1999. He returned as guest lecturer for the Career Opportunities Class at the University of Tennessee Department of Biosystems Engineering and Soil Science, a class he has taught every fall since 1998.

In 2014, Assistant Plan Reviewer, Eric Jervis began a three-year term as Director Representing Regulators on the TOWA Board.

Office Manager Heather Rockwell maintained her Certified Public Administrator designation by completing required continuing education credits. The County Officials Certificate Training Program administered by the University of Tennessee County Technical Assistance Service offers comprehensive knowledge of the inner workings of county government to afford graduates a better understanding of the county as an entity, and provides specialized administrative, management and leadership training to help them run their offices more effectively.

Department Goals for 2015

The Department of Sewage Disposal Management has established a number of goals for the upcoming year. Department management and staff will continue to evaluate the Department's internal organizational structure and to improve utilization of the technology initiatives begun previously. In addition, the Department will maintain its focus on providing friendly, efficient and effective customer service and transparency of Department work flow.

In 2015, the Department intends to fill the vacant position of Plat Reviewer, so that the process of reviewing and approving plats, and subsurface sewage disposal location maps, will operate in a prompt and efficient manner.

In early 2014, County Mayor Rogers Anderson announced the creation of the *Williamson County Small Business Wastewater Task Force*. Due to the age of some systems in use throughout the County and the standards of the current *Regulations*, there is often a conflict in abiding by the high standards that have been established and which have enabled the measure of success and viability enjoyed in Williamson County, while at the same time preserving and encouraging the economic growth and development that is vital to the smaller communities in Williamson County and the County's overall economic health. Thus, the Task Force was created to find a proper balance between the two—respecting the high standards that have been so beneficial to the value of land and development in Williamson County, while also respecting the economic opportunities that exist or are potential for commercial uses in areas without public sewer. The Task Force was charged with studying uses associated with high strength wastewater, reviewing new technologies, determining how standards may be addressed in a way that gives flexibility while still maintaining the integrity of the program, balancing the rights and opportunities of property owners with the rights of the neighbors and the community as a whole, for environmentally sound and healthy uses that do not cause hazards or nuisances.

The Task Force is comprised of a broad spectrum of citizens, business leaders and technical experts, who share a common goal of working together to study Williamson County's subsurface sewage disposal solutions for existing or converted commercial users, and recommend possible solutions to some of the challenges the County faces as it continues to grow. Over the last year, the group met monthly to help identify our strengths and weaknesses, formulate short and long-term goals, and establish a plan for accomplishing those goals. Department staff have assisted the Task Force in their charge, and will continue to do so in 2015, with the culmination of written recommendations (and potential regulation amendments) to be presented to the Board of Health in the future.

Finally, in the upcoming year, the Department pledges to continue its core work of administering the County's Regulations Governing On-Site Sewage Disposal Systems in a thorough and equitable manner in order to protect the health and well being of the public, the groundwater and surface water resources, and the quality of the environment of Williamson County. Additionally, the Department staff will strive to improve technology, procedures, and services, to ensure processing of septic system related projects is a timely and pleasant experience for its customers.